

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)
2. (Withdrawn) A method for detecting at least one organophosphorus or carbamate compound in a sample comprising contacting said sample with enzyme acetylcholinesterase immobilized in a sol-gel or a membrane, wherein the enzyme is inhibited by at least one of the organophosphorus or carbamate compounds.
3. (Withdrawn) The method according to claim 2 wherein the sample is contacted with acetylcholinesterase immobilized in a sol-gel or a membrane wherein the pH ranges from about 5.95 to about 11.52.
4. (Withdrawn) The method according to claim 2 wherein the compound detected is an organophosphorus compound and 1% bromine is added to the organophosphorus compound prior to addition to the immobilized enzyme.
5. (Withdrawn) The method according to claim 2 wherein the enzyme is immobilized in a sol-gel.

6. (Withdrawn) The method according to claim 2 wherein the enzyme is immobilized in a membrane.

7. (Cancelled)

8. (Currently Amended) The detector according to claim ~~7-19~~ wherein the acetylcholinesterase is immobilized in a sol-gel.

9. (Currently Amended) The detector according to claim ~~7-19~~ wherein the acetylcholinesterase is immobilized in a membrane.

10. (Currently Amended) The detector according to claim ~~7-19~~ wherein the package comprises a semipermeable polyethylene bag that contains the membrane or sol-gel immobilized acetylcholinesterase, which semipermeable polyethylene bag is opened after exposure to ~~expose the~~ acetylcholinesterase ~~to the~~ inhibitor to commence the enzyme assay.

11. (Currently Amended) The detector according to claim ~~1-19~~ wherein the sol-gel is glass prepared from tetramethylorthosilicate.

12. (Previously Presented) The detector according to claim 11 wherein the acetylcholinesterase is stabilized with a sugar.

13. (Previously Presented) The detector according to claim 12 wherein the sugar is trehalose.

14. (Currently Amended) The detector according to claim ~~1~~-19 wherein the sol-gel is contained in a tube.

15. (Currently Amended) The detector according to claim ~~1~~-19 wherein the sol-gel particles are from 230-400 mesh.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (New) A detector for detecting at least one compound selected from the group consisting of organophosphorus and carbamate compounds which are inhibitors of the enzyme acetylcholinesterase, wherein acetylcholinesterase is immobilized in a sol-gel or in a membrane, wherein said sol-gel or membrane containing acetylcholinesterase is packaged in a semipermeable material that controls access of volatile acetylcholinesterase inhibitors.